

[illegible]

1 This invention is a method of multilevel dither screening  
2 in a printer. Plural pixel values are packed into equal  
3 sections of a first data word. Corresponding dither values  
4 are packed into the equal sections of a second data word.  
5 These first and second data words are added in an arithmetic  
6 logic unit selectively spilt into the equal sections. Each  
7 section of the sum data word is saturated to all 1's. A  
8 predetermined number of least significant bits of the  
9 saturated sections are truncated. The resulting normalized  
10 pixel values are quantized into a limited set of threshold  
11 ranges. This dithering process serves to introduce an amount  
12 of scattering to the input pixel values to reduce  
13 quantization and pixelation artifacts in the final printed  
14 product.